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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,280	09/24/2003	Masao Uyama	03500.017591	3501

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EXAMINER

CHEN, SOPHIA S

ART UNIT PAPER NUMBER

2852

DATE MAILED: 11/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/668,280

Applicant(s)

UYAMA ET AL.

Examiner

Sophia S. Chen

Art Unit

2852

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-39 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/24/03 & 11/7/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Ex parte Quayle***

1. This application is in condition for allowance except for the following formal matters:

***Drawings***

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because of the following informalities:
  - a. Reference character "12" has been used to designate both "fixing means or a roller fixing device" (page 18, line 18; page 30, line 16; Figure 1) and "sheet feed rollers" (page 30, line 12 and Figure 1).
  - b. Reference character "d" has been used to designate both "a primary transfer nip portion" (page 29, lines 1-2, etc. and Figure 1) and "a stroke or movement amount" (page 33, lines 15-16, etc. and Figure 31).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required

corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

3. The abstract of the disclosure is objected to because of the inclusion of legal phraseology, such as "comprises" (page 69, line 4), "means" (page 69, lines 4, 8, 16, 22, and 24), and "said" (page 69, lines 10, 13, and 15). Correction is required. See MPEP § 608.01(b).
4. The abstract of the disclosure is objected to because it exceeds 150 words. Correction is required. See MPEP § 608.01(b).
5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
6. The disclosure is objected to because of the following informalities:
  - a. Page 18, line 18, "mean" should be "means".
  - b. Page 30, line 12, "a sheet feed rollers" should be "sheet feed rollers".
  - c. Page 41, lines 2-7, "the relationship --- (i.e. the developing width L2 (mm) of the developing area) ---" not consistent with page 42, lines 8-11 of the specification and Figure 3.Appropriate correction is required.
7. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Claims***

8. Claims 11, 12, 29, and 30 contain the following informalities:
- a. Claim 11, line 2, "said charging device" should be "a charging device".
  - b. Claim 12, lines 2-3, "said charging device" should be "a charging device".
  - c. Claim 29, line 2, "said charging device" should be "a charging device".
  - d. Claim 30, line 3, "said charging device" should be "a charging device".

Appropriate correction is required.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

***Allowable Subject Matter***

9. Claims 1 through 39 are allowable over the prior art of record.
10. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not teach or suggest an image forming apparatus satisfying the following condition:  $L1 + d \leq L2$ , wherein  $L1$  (mm) be a developing width,  $L2$  (mm) be a contact width of developer charging means, and  $d$  (mm) be a width of movement of the developer charging means in the direction substantially the same as the longitudinal direction of an image bearing member, in combination with the remaining claimed limitations.

***Citation of Pertinent Prior Art***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shoji et al. (US Pat. No. 5,740,494) discloses an image forming apparatus comprising an image bearing member; developing means; developer charging means being moved in a direction substantially the same as a longitudinal direction of the image bearing member upon charging the residual developer; wherein **a contact width of the developer charging means + a width of movement of the developer charging means  $\leq$  a developing width of the developing means (not a developing width of the developing means + a width of movement of the developer charging means  $\leq$  a contact width of the developer charging means as disclosed in claims 1 and 18).**

Takeda et al. (US Pat. No. 6,215,967 B1) discloses a color image forming apparatus comprising a plurality of image forming stations each of which having an image bearing member; developing means; and developer charging means.

Watanabe et al. (US Pat. Pub. No. US 2002/0057925 A1) discloses an image forming apparatus comprising an image bearing member; developing means; developer charging means; and second developer charging means.

Okubo et al. (US Pat. No. 6,807,384 B2) discloses an image forming apparatus comprising an image bearing member; developing means; developer charging means; and second developer charging means.

Watanabe et al. (JP 2002-099176 A) discloses an image forming apparatus comprising an image bearing member; developing means; developer charging means; and second developer charging means.

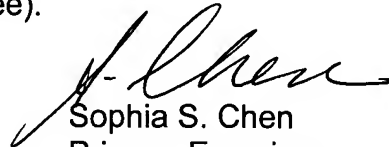
Yoshikawa et al. (JP 2003-195684 A) discloses a color image forming apparatus comprising a plurality of image forming stations each of which having an image bearing member; developing means; developer charging means; and second developer charging means.

#### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sophia S. Chen whose telephone number is (703) 308-7617. The examiner can normally be reached on M-F (7:00-3:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley can be reached on (703) 308-1373. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sophia S. Chen  
Primary Examiner  
Art Unit 2852

Ssc  
November 3, 2004